



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,743	07/20/2001	Juhani Maki	19380.0009	8845

7590 06/27/2003

Edward A Pennington
Swidler Berlin Shereff Friedman
3000 K Street NW Suite 300
Washington, DC 20007-5116

EXAMINER

PRATT, HELEN F

ART UNIT	PAPER NUMBER
----------	--------------

1761

5

DATE MAILED: 06/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,743

Applicant(s)

MAKI, JUHANI

Examiner

Helen F. Pratt

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 7, 9, 10, 11, 16, 17, 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6 and 7, 9 are indefinite in the use of the phrase "preferably". It is not known whether the preferred limitation is required or not.

Regarding claims 10 and 16, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claims 11 and 18, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The

Art Unit: 1761

Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 17 recites the broad recitation "by means of a hydroxide", and the claim also recites "particularly potassium or ammonium hydroxide" which is the narrower statement of the range/limitation. The claim also contains the phrase "particularly to adjust the crystallization of free ammonium chloride". The claim language seems to indicate that there is another use of the chemicals which is not stated.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 9, 13, 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kai et al. (351,845).

Kali et al. disclose a product and process of making as in claims 1 and 13 of making a food salt by adding magnesium chloride hexahydrate and ammonium chloride together in solution form which yields ammonium carnallite by crystallization upon

Art Unit: 1761

cooling. The product is seen to be in a complex form as a chemical reaction has taken place (page 1, col. 1, lines 35-41, lines 46-55).

The product is seen to contain water in the range of 4-6 as a hexahydrate is used as above as in claim 2.

Claim 9 requires that the compound contain at least 3% magnesium. Kali '845 discloses the use of 210 grams of magnesium chloride, which is within the claimed range.

Returning the mother liquor after precipitation to be supplemented with the metal chloride and ammonium chloride as in claim 14 is disclosed in page 1, col. 2, lines 74-84).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-8, 10-12, 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kali et al. (351,845) in view of Davy (2,471,144) and German patent 1 567 937.

Claim 15 further requires that calcium chloride is in the product and claim 16 potassium chloride. Davy '144 disclose a process of making a salt substitute by combining ammonium chloride, and calcium formate and magnesium citrate. Even

Art Unit: 1761

though the composition seems to be dry, it shows the combination of calcium formate (especially for the product compositions) with the other chemicals. Also, the German patent '937 discloses that salt solutions containing calcium are known in making the claimed compositions (page 1, 2nd para. and page 2, first para.). Therefore, it would have been obvious to add calcium chloride to the composition of the combined claims.

Claim 4 further requires that the product contains a complexing agent. However, no weight is given to the complexing agent, if the ingredients in the complexing agent do not appear in the product. The use of the complexing agent is considered to be a method limitation in a process claim and is not given weight. Therefore, it would have been obvious to make a product as claimed.

Claims 5-7 require that the various ingredients are in particular amounts. However, it would have been within the skill of the ordinary worker to vary the amounts of ingredients to make the claimed product and it would have been obvious to vary the amounts of ingredients within particular amounts.

Claim 8 requires that the product contain potassium chloride. Davy discloses a composition containing such (col. 2, lines 30-36). Therefore, it would have been obvious to make a composition containing potassium chloride.

Claims 10 and 11 further require various other ingredients in the composition. However, the addition of other ingredients to salt is well known as in the vegetable salts, such as garlic and onion salts. Therefore, it would have been obvious to make a product containing other ingredients as in "and the like".

Art Unit: 1761

Claim 12 further requires that the food salt be used in processing and or preservation. However, this is the known use for salt, and the claimed salt does not exclude the use of sodium chloride, which is notoriously well known in food preservation. Therefore, it would have been obvious to use a salt in preservation or processing.

Claim 17 further requires that the pH of the mother liquor be adjusted with a hydroxide to adjust the crystallization of free ammonium chloride. However, Delmar disclose that potassium hydroxide is used to neutralize acids (col. 2, lines 39-60) to make various compounds. Therefore, it would have been obvious to use a known neutralizing material in the process of the combined references to adjust the crystallization by neutralizing the composition depending on the amounts used.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over the above combined references as applied to the above above, and further in view of Eisenstadt and German patent 156937.

Claim 18 further requires that the chemicals be combined in a solid state with possibly other salts and ground and agitated. Eisenstadt discloses combining potassium chloride with ammonium chloride (abstract). German patent 1567937 discloses that the claimed ingredients are known in a brine mixture, which is precipitated. As it is known to use a liquid mixture, it would have been within the skill of the ordinary worker to use a dry mixture as the claimed ingredients are known. Nothing new is seen in grinding salt mixtures, which is how salts are made for human

Art Unit: 1761


consumption in general. Therefore, it would have been obvious to use a dry mixture containing the claimed ingredients.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 703-308-1978. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on (703) 308-3959. The fax phone number for the organization where this application or proceeding is assigned is 703-305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Hp 6-20-03


HELEN PRATT
PRIMARY EXAMINER